

Figure 1. Diagram of the salt formed between a phosphorylated analog of taxol with a single guanidino headgroup of a heptamer of L-arginine.

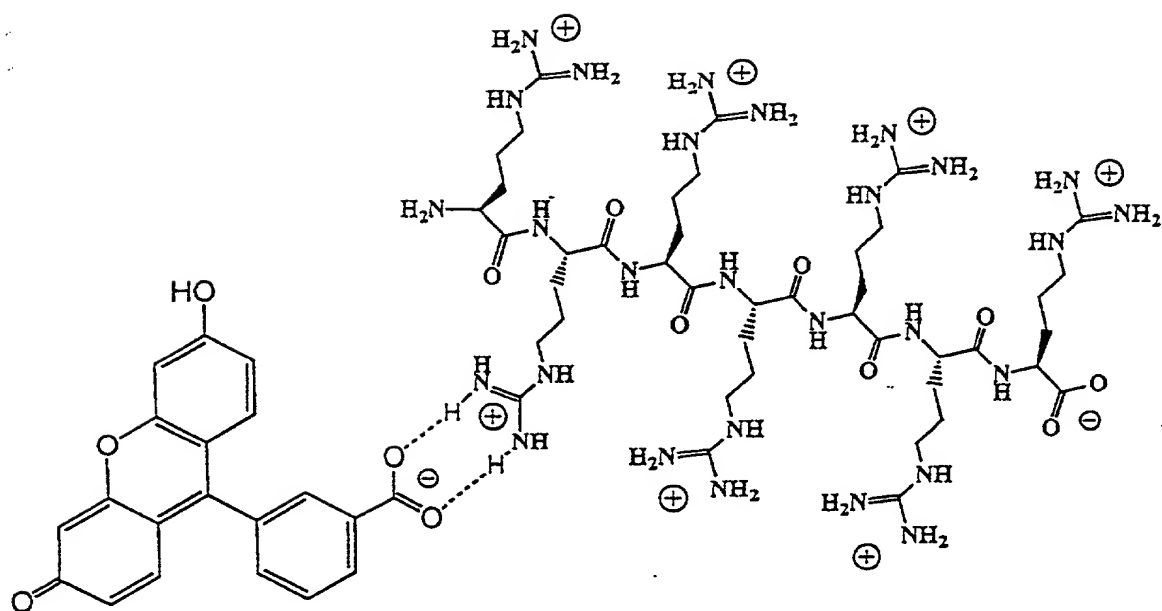


Figure 2. Diagram of the salt formed between fluorescein and a single guanidinium headgroup of a heptamer of L-arginine.

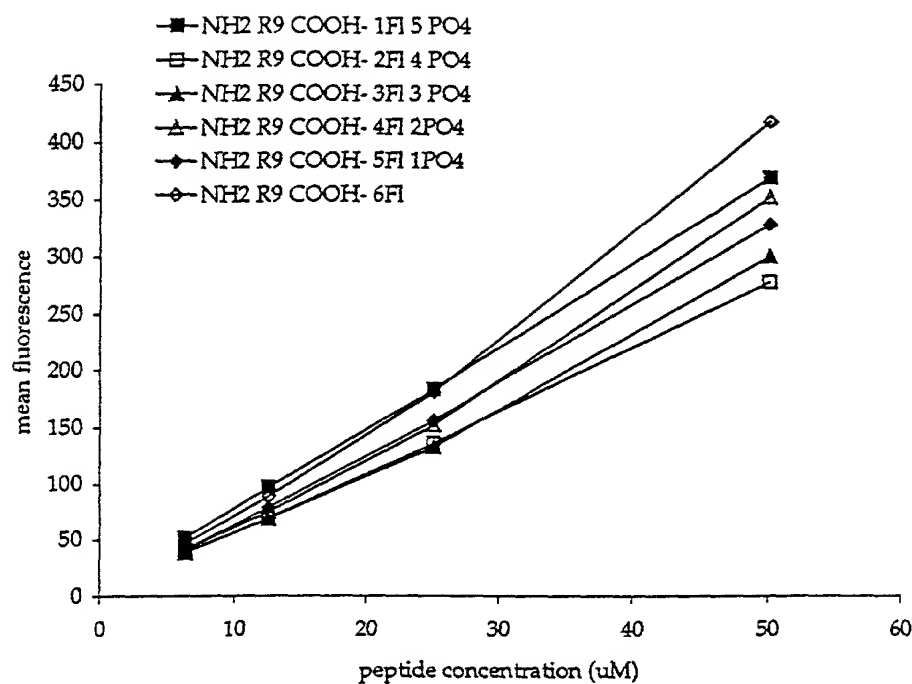


Figure 3. Staining of lymphocytes using different salts between fluorescein and nonamers of arginine. Human lymphocytes (Jurkat) were incubated with varying concentrations of each of the fluorescein-polyarginine salts for five minutes in PBS/2% fetal calf serum at room temperature. The cells were washed with PBS, exposed to 0.1% propidium iodide and analyzed by flow cytometry. The mean fluorescence of 10^4 cells is shown.

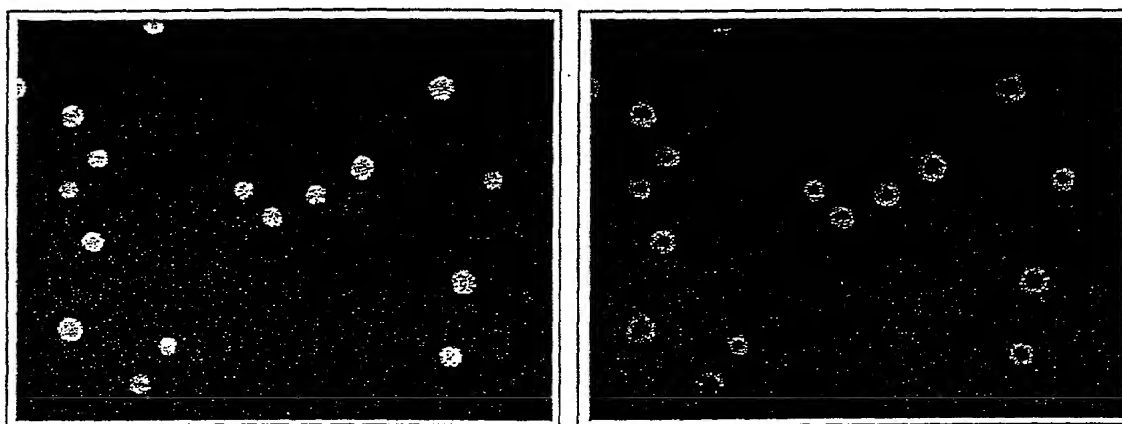


Figure 4. Micrographs of lymphocyte stained with a salt of fluorescein and a nonamer of L-arginine. Fluorescent and transmission views of the same field demonstrate that all cells were highly stained. The human t cell line, Jurkat, was exposed to 50uM solution of the 1:1 salt of fluorescein and R9 for five minutes at room temperature. The cells were washed, and placed on a coverslip and analyzed using a fluorescent microscope.

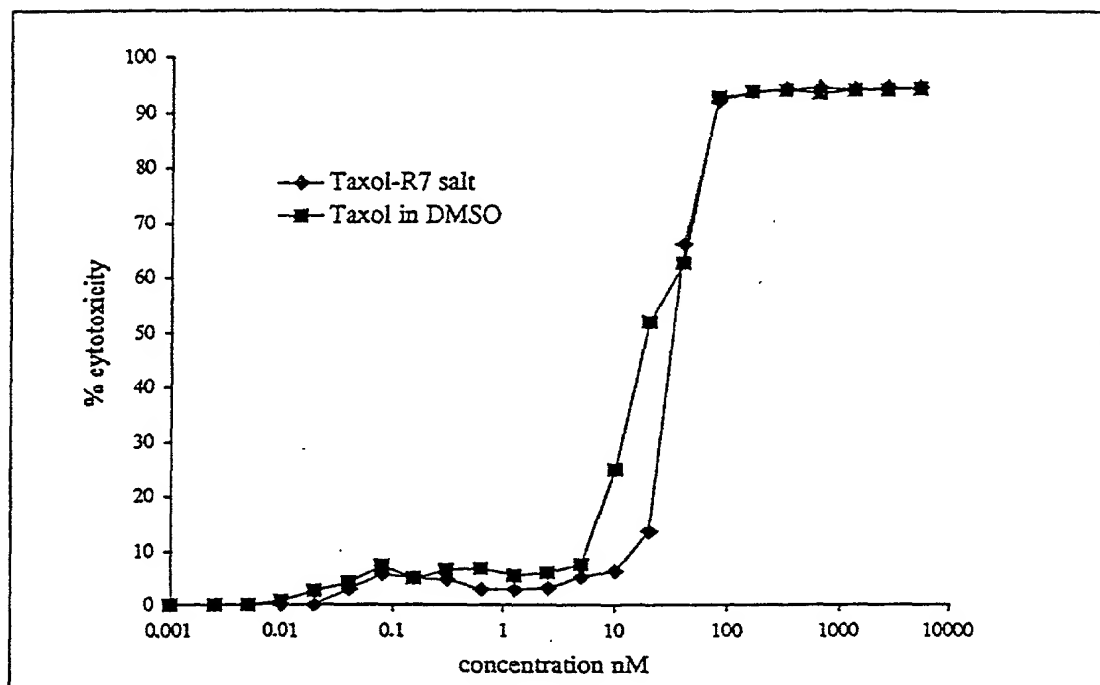


Figure 5. Cytotoxicity assay demonstrating that the taxol-heptaarginine salt was equally potent at killing lymphocytes as taxol dissolved in dimethyl sulfoxide. Cells were incubated with varying concentrations of either taxol dissolved in DMSO or the 1:1 taxol heptaarginine salt dissolved in PBS for 3 days at 37°C. At the end of this period, cells were exposed to 0.05 M MTT in PBS, incubated for one hour, spun, and incubated with acidic propanol for 2 hours. At the end of this incubation the optical density at 650nm was measured, and the percentage of dead cells was calculated.